



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10**

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OFFICE OF  
ECOSYSTEMS, TRIBAL AND  
PUBLIC AFFAIRS

July 6, 2010

Tim Romanski  
U.S. Fish and Wildlife Service  
510 Desmond Drive SE, Suite 102  
Lacey, Washington 98503-1263

Re: U.S. Environmental Protection Agency (EPA) comments for the Clark Springs Water Supply System (CSWSS) Habitat Conservation Plan (HCP) Draft Environmental Impact Statement (DEIS). (EPA Project Number: 06-044-FWS)

Dear Mr. Romanski:

This review was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Under our policies and procedures, we evaluate the environmental impact of the proposed action and the adequacy of the impact statement. We have assigned an Environmental Concerns – Insufficient Information (EC – 2) rating to the DEIS. A copy of the EPA rating system is enclosed.

We understand the City of Kent's (City) legal mandate to seek reliable sources of municipal water supply. We agree with the DEIS's overall conclusion that the Proposed Action would result in net benefits to water quality and fish as compared to the No-Action alternative. These benefits would be achieved primarily through the HCP's Habitat Conservation Measures (HCM) – especially flow augmentation (HCM 1). Other less defined but potentially significant benefits would likely be achieved through the City's ongoing vested interest in and stewardship of the Rock Creek Basin (E.g., HCM 8 - Riparian acquisition, easement, and enhancement fund).

While we agree that the HCP would contribute to an overall environmental improvement compared to No-Action, we remain concerned that the HCMs – as written – may not fully protect the environment. Our primary environmental concerns center on the potential risk of instream flow shortfalls. If instream flows consistently fall below the target – even with maximum augmentation - we are concerned about adverse impacts to water quality and fish. We believe the Final EIS and HCP should (i) include additional information on the potential risk of instream flow shortfalls, and, (ii) commit the City and Services to an adaptive management process for dealing with chronic instream flow shortfalls.

We are also concerned about risks to fish passage and habitat improvements (HCMs 1-6) and recommend the Final EIS and HCP include additional information on (i) risk to HCMs, and, (ii) the City's requirements to ensure their effectiveness of the course of the 50 year HCP.

Finally, we believe the highest level of environmental protection for Rock Creek would likely involve reducing or eliminating water withdrawals at the Clark Springs Water Supply

Facility. We appreciate the City's substantial efforts to pursue alternative water supplies and water management strategies (HCP, Vol. II, Appendix G) and understand, as stated, that "None of the investigations resulted in the identification of cost-effective, feasible, or reliable alternative water supplies to the Clark Springs Water Supply Facility." (HCP, Vol. I, p. 8-3). We note, however, that alternative water supplies may become more feasible over the course of the 50 year HCP and recommend that the Final EIS and HCP more fully describe the Services' expectations for the City's ongoing efforts to find alternative water supplies. Please consider the potential benefits of a minimum requirement (e.g., percentage of overall revenue) for the City to (i) pursue and/or secure alternative water supplies, and/or, (ii) achieve water conservation.

See our enclosed detailed comments for additional information on the concerns and recommendations summarized above. Thank you for this opportunity to comment and if you have any questions or concerns please contact Erik Peterson of my staff at (206) 553-6382, or by electronic mail at [peterson.erik@epa.gov](mailto:peterson.erik@epa.gov).

Sincerely,



Christine B. Reichgott, Manager  
Environmental Review and Sediment Management Unit

Enclosure:

EPA Region 10 Detailed Comments on the Clark Springs Water Supply Facility Draft  
Environmental Impact Statement  
EPA Rating System for Draft Environmental Impact Statements

## **EPA REGION 10 DETAILED COMMENTS ON THE CLARK SPRINGS WATER SUPPLY FACILITY DRAFT ENVIRONMENTAL IMPACT STATEMENT**

### **Flow Augmentation Plan during October through December (HCM-1)**

We believe the DEIS and HCP do not contain sufficient information about HCM-1 to assess whether or not the environment – especially fish species - would be fully protected. According to the DEIS, "...implementation of the flow augmentation program under the Proposed Action may not always meet the instream flow targets identified in the proposed HCP." (p. 4-18). While not meeting flow targets was mostly "relatively minor" during your analysis period (1986-2004), we believe potential impacts from land use and climate change may increase the frequency and intensity of instream flow shortfalls. If instream flow shortfalls increase, we are concerned that the City's commitment to specific maximum augmentation rates (and not minimum instream flows) could result in adverse impacts to fish.

### *Recommendations*

We recommend that the Final EIS and HCP more sufficiently account for land use (1) and climate changes (2). We also recommend that the Final EIS and HCP more explicitly address potential failures to meet minimum instream flow targets (3).

1. We recommend that the Final EIS and HCP include more information in relevant Land Use and Ownership sections.
  - a. Update Figure 3.2-1 "Land uses in the Rock Creek Basin". This Figure does not account for land use changes over the past decade. Consider, for instance, the development northwest of Ravensdale and southwest of SE Kent-Kangley Road.
  - b. Account for and analyze updated land use information. The Final EIS's version of DEIS section 4.2 may be the appropriate place for this additional information.
    - i. In 1999 there were 250 private wells in the Rock Creek Basin – all of which were exempt from water rights (DEIS, p. 5-3). How many wells are there now? How many are projected over the course of the next 50 years? How might their water withdrawals impact the City's efforts to meet the HCP's requirements – especially Rock Creek Flow Targets?
    - ii. Residential and industrial developments generally increase impervious surfaces, which, in turn, may effect both surface and ground water hydrology. Please discuss how projected development over the next 50 years would affect the City's efforts to meet the HCP's requirements.
  - c. If current or future land use changes, including wells and other water withdrawals in the Rock Creek Basin, are predicted to substantially increase the frequency and intensity of failures to meet instream flow targets, consider including private wells and/or land use as a "Changed Circumstance" in Section 9 of the Implementation Agreement and Section 2.1.2.3 of the HCP.

2. We recommend that the Final EIS and HCP account for the state of science on projected climate change impacts.
  - a. Discuss the potential implications for the Intergovernmental Panel on Climate Change's conclusion that, "Warming in western mountains is projected to cause decreased snowpack, more winter flooding and reduced summer flows, exacerbating competition for over-allocated water resources."<sup>1</sup> We are especially concerned that lower low flows would increase the rate at which instream flow targets would not be met – even with maximum augmentation.
  - b. Potentially useful resources:
    - i. Preparing for Climate Change: A Guidebook for Local, Regional and State Governments.<sup>2</sup>
    - ii. Comprehensive Assessment of Climate Change Impacts on Washington State.<sup>3</sup> See, especially, Chapter 6, "Impacts of Climate Change on Key Aspects of Freshwater Salmon Habitat in Washington State".
    - iii. Hydrologic Climate Change Scenarios for the Pacific Northwest Columbia River Basin and Coastal Drainages.<sup>4</sup>
    - iv. US EPA Proceedings: First National Expert and Stakeholder Workshop on Water Infrastructure Sustainability and Adaptation to Climate Change.<sup>5</sup>
3. We recommend the Final EIS and HCP describe what rate of failure to meet minimum instream flow targets would trigger an adaptive management process. If a process was triggered, what actions would the City and/or the Services take? It may be appropriate to include this process as an element of Monitoring and Evaluation Measure (MEM-1), "Rock Creek and Augmentation Flow Monitoring".

### **Passage improvements at the mouth of Rock Creek (HCM-2)**

We are concerned about risks to HCM-2, such as winter flooding. HCM-2, like HCM-1, is a key component of achieving the HCP's environmental benefits. Without HCM-2, proposed habitat improvements to Rock Creek (HCMs 3, 4, 5 and 6) would achieve less because fish may not be able to pass from the Cedar River to Rock Creek.

Because HCM-2 provides important benefits, we are concerned about the City's limited reconstruction liability. According to the HCP, "Weirs constructed to improve passage at the mouth of Rock Creek will be reconstructed as needed, with up to the equivalent of one complete reconstruction effort funded over the term of the HCP." (HCP Vol. 1, p. 5-13). We are unsure how this limitation is fully protective of the environment because there does not appear to be a guarantee that HCM-2 will be functional over the course of the HCP.

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<sup>1</sup> [http://www.ipcc.ch/publications\\_and\\_data/ar4/syr/en/spms3.html](http://www.ipcc.ch/publications_and_data/ar4/syr/en/spms3.html)

<sup>2</sup> <http://cses.washington.edu/db/pdf/snoveretalgb574.pdf>

<sup>3</sup> [http://www.ecy.wa.gov/climatechange/ipa\\_resources.htm](http://www.ecy.wa.gov/climatechange/ipa_resources.htm)

<sup>4</sup> <http://www.hydro.washington.edu/2860/>

<sup>5</sup> <http://www.epa.gov/nrmrl/wswrd/wqm/wrap/workshop.html>

*Recommendations*

In order to ensure that the predicted benefits of HCM 2 (as well as HCMs 3, 4, 5, and 6) occur over the full course of the 50 year HCP, we recommend that they (i) be designed to withstand projected disturbances, and/or, (ii) include adequate requirements to ensure that HCMs are reconstructed when the need arises. For HCM-2, please either include additional information on how “one complete reconstruction effort” is adequate in light of projected potential disturbances or increase this requirement. Address whether or not projected climate change impacts - such as increased winter flooding – are relevant to the design of HCMs or the HCP’s adaptive management (e.g., HCM reconstruction requirements).

**U.S. Environmental Protection Agency Rating System for  
Draft Environmental Impact Statements  
Definitions and Follow-Up Action\***

**Environmental Impact of the Action**

**LO – Lack of Objections**

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

**EC – Environmental Concerns**

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

**EO – Environmental Objections**

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

**EU – Environmentally Unsatisfactory**

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

**Adequacy of the Impact Statement**

**Category 1 – Adequate**

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

**Category 2 – Insufficient Information**

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

**Category 3 – Inadequate**

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.